

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/647,472	-	08/26/2003	Lawrence M. Burns	1875.3770001 2309		
26111	7590	08/09/2005		EXAMINER		
		R, GOLDSTEIN &	NGUYEN, JIMMY			
1100 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005				ART UNIT	PAPER NUMBER	
				2829		

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

,			AX			
	Application No.	Applicant(s)				
	10/647,472	BURNS ET AL.				
Office Action Summary	Examiner	Art Unit				
	Jimmy Nguyen	2829				
The MAILING DATE of this communication a Period for Reply	appears on the cover sheet v	vith the correspondence addre	SS			
A SHORTENED STATUTORY PERIOD FOR REF THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a result of the period for reply is specified above, the maximum statutory perions are period for reply within the set or extended period for reply will, by stated and the period for reply will, by stated and period for reply will, by stated and period for reply will. By stated and period for reply will, by stated and period for reply will. By stated and period for reply will, by stated and period for reply will. By stated and period for reply will, by stated and period for reply will. By stated and period for reply will, by stated and period for reply will be stated and period for repl	N. 1.136(a). In no event, however, may a reply within the statutory minimum of the od will apply and will expire SIX (6) MC tute, cause the application to become A	reply be timely filed irty (30) days will be considered timely. DNTHS from the mailing date of this comm	nunication.			
Status						
1) Responsive to communication(s) filed on 20	May 2005.					
, <u> </u>	his action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
closed in accordance with the practice unde	er Ex parte Quayle, 1935 C.	D. 11, 453 O.G. 213.				
Disposition of Claims						
4) ☐ Claim(s) 1-20 is/are pending in the application 4a) Of the above claim(s) is/are withd 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-4, 11-14 is/are rejected. 7) ☐ Claim(s) 5-10 and 15-20 is/are objected to. 8) ☐ Claim(s) are subject to restriction and	rawn from consideration.					
Application Papers	·					
9)☐ The specification is objected to by the Examination The drawing(s) filed on 26 August 2003 is/ar Applicant may not request that any objection to the Replacement drawing sheet(s) including the corrupt The oath or declaration is objected to by the	re: a)⊠ accepted or b)⊡ c he drawing(s) be held in abeya rection is required if the drawin	ance. See 37 CFR 1.85(a). g(s) is objected to. See 37 CFR				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the papplication from the International Bure * See the attached detailed Office action for a least content.	ents have been received. ents have been received in riority documents have bee eau (PCT Rule 17.2(a)).	Application No n received in this National Sta	age			
Attachment(s)						
Notice of References Cited (PTO-892)		Summary (PTO-413)				
 Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/Paper No(s)/Mail Date 		o(s)/Mail Date Informal Patent Application (PTO-15 	52)			

Application/Control Number: 10/647,472 Page 2

Art Unit: 2829

DETAILED ACTION

Response to Argument

The examiner acknowledges the amendment filed 5/20/05 has been carefully considered and upon further search the examiner is hereby make a new ground of rejection.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1 4,11 14 are rejected under 35 U.S.C. 102(b) as being anticipated Ukei et al (US 6, 239,603).

As to claims 1,11,14, Ukei et al discloses (fig 1) a method and system of monitoring an integrated circuit chip, comprising:

- (a) receiving at least one digitized sense signal (from the sense circuit 1 -5) from the integrated circuit chip (10), whereby the at least one digitized sense signal represents a corresponding process-dependent parameter (test signal, voltage or current) within the integrated circuit chip (10); and
- (b) determining an analog value (the parameters could be digital or analog form) for the at least one process dependent circuit parameters (test signal, voltage or current) from the corresponding at least one digitized signal (1 -5); wherein the process-

Application/Control Number: 10/647,472

Art Unit: 2829

dependent parameter (test signal, voltage or current) is measured within a process monitor portion of the integrated circuit (10) and the at least one determined analog value is utilized (test signal, voltage or current) to correct for the process-dependent parameter in an operational portion of the integrated circuit (10).

Page 3

As to claims 3, 13 Ukei et al discloses (fig 1) the method according to claim 1, wherein step (b) comprises retrieving the at least one value (expected value) from a look-up table using the at least one digitized signal.

As to claims 4, 14, Ukei et al discloses (fig 1) the method according to claim 1, wherein step (b) comprises calculating (from the monitor TEG) the at least one value from the at least one digitized signal.

As to claims 2, 12, Ukei et al discloses (fig 1) a method wherein steps (a) and (b) are perform outside of the ic (10).

Allowable Subject Matter

1. Claims 5 – 10, 15 – 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record are fail to disclose digitized sense signal includes a plurality of digitized sense signals that represent a plurality of the following:

a gate-to-source threshold voltage of a transistor fabricated on the integrated circuit chip;

a transconductance parameter of a transistor fabricated on integrated circuit chip;

a sheet resistance of a resistor fabricated on the integrated circuit chip;

a temperature of the integrated circuit chip; and

a power supply voltage on the integrated circuit chip.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy Nguyen whose telephone number is 571 –272-1965. The examiner can normally be reached on M-f from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ramtez Nestor, can be reached on 571-272-2034. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 10/647,472

Art Unit: 2829

Page 5

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JN. August 1, 2005 VINH NGUYEN
PRIMARY EXAMINER
A.u. 2829
08/08/05